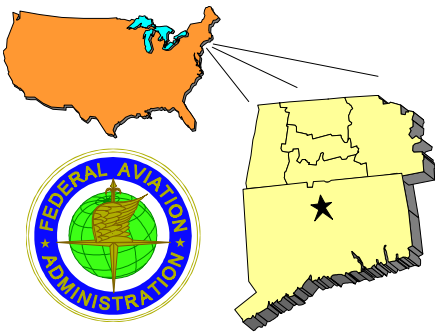
Airwaves

News from the Windsor Locks Flight Standards District Office — Summer, 1999 — No. 34

Serving Connecticut and Western Massachusetts



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JAA Acceptance of Repair Stations

by Arnie Paye, Principal Maintenance Inspector, NE-FSDO-03

Over the past several years, the FAA has been in discussions with the Joint Aviation Authority (JAA) to establish an international agreement for maintenance, certification, flight simulators, and other requirements of commercial aircraft. The JAA represents 19 full member countries' National Aviation Authorities (NAA) of Europe and is comprised of representatives of each NAA, along with a small number of JAA employees. Each NAA is a stand alone national organization that, by treaty with the European Union (EU), is legally obligated to follow the requirements and policies developed by the JAA. The JAA has oversight responsibility to ensure that all 19 member countries apply and follow the same requirements.

In 1994, the EU passed regulations that required all EU operated aircraft used in commercial aviation to be maintained in accordance with the Joint Aviation Requirements (JAR). JAR 145 was developed using Federal Aviation Regulation (FAR) 145 as a foundation, with a few additional requirements.

As of January 1996, the US government no longer negotiates Bilateral Airworthiness Agreements, such as we currently have with Canada. These agreements have been replaced with the Bilateral Aviation Safety Agreement (BASA), consisting of an executive agreement and an Implementation Procedure (IP). A BASA outlines the general scope of regulatory activities for the acceptance of findings and approvals, and is signed by the US Department of State and the Foreign Ministry of the participating country. An IP provides for technical cooperation between the FAA and its counterpart, the NAA, and facilitates reciprocal airworthiness agreements of products and services (such as maintenance) used in air transportation. In June of 1997, the FAA signed a BASA/MIP (Maintenance Implementation Procedure) with Germany, and in 1999 with Ireland. As part of the BASA/MIP assessment process, the FAA and JAA identified differences between FAR 145 and JAR 145.

JAR 145.10 permits organizations located outside the territories of the JAA member

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JAA ..... *Continued from page 1*

countries to be accepted when working in accordance with the conditions detailed in a BASA/MIP. A repair station certificated under FAR Part 145 may be accepted on behalf of the JAA if the repair station complies with specific additional conditions beyond those in FAR Part 145. These special conditions must be addressed within the JAA Supplement to the repair station Inspection Procedures Manual.

During the month of August 1999, the FAA and the JAA will begin the process of turning over responsibilities for surveillance, initial acceptance, and renewal of JAA accepted repair stations. After August 1999, the FAA will progressively accept the JAA turnover of the accepted repair stations as each one comes up for JAA renewal. The process includes surveillance of the special conditions and submission of recommendations to the JAA following procedures described in the new chapters of the FAA Airworthiness Inspectors Handbook, Order 8300.10.

In the coming months, you will be hearing much more about this process. If you are a FAA certificated repair station as well a JAA accepted repair station, the FAA principal inspector will be performing surveillance of your facility to ensure compliance with FAR Part 145 and the additional special conditions described in the JAA supplement to the Inspection Procedures Manual (IPM). If you are requesting renewal of your JAA certificate within the next 60 days, please contact your local FAA Principal Inspector to begin the process. He will forward a packet to you containing the necessary forms and information. Please be patient with us during this transition period, as guidance for this process is very new to everyone involved.

Further information describing the acceptance of repair stations by the JAA under the BASA/MIP process may be found in FAA Advisory Circular 145-8, dated 3/29/99. We hope to present a seminar in the near future to answer questions you may have regarding this process. A separate announcement will be mailed to those facilities which are currently JAA accepted or actively seeking initial JAA acceptance, giving the location and date of the seminar. Additional articles will be forthcoming in *Airwaves* discussing the details of the acceptance process and the special conditions that must be addressed in the JAA Supplement.

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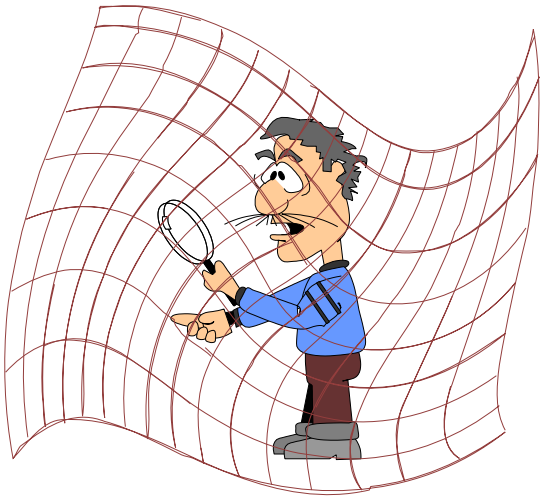
Is Your Cargo Net Installation Approved?

by Bert Labbe, Principal Maintenance Inspector, NE-FSDO-03

The tie-down equipment or net used in your aircraft should be designed to keep your luggage or cargo securely in place in order to prevent shifting of CG or becoming a projectile during emergency landing conditions and protect each occupant under those conditions. In addition, the tie-down or net material must meet the burn rate or flammability standards under which the aircraft was certified or altered.



Are there standards for tie-down equipment?

Yes, an approved net, for example, means it was produced meeting one of the following minimum performance standards:

1. A net manufactured under Technical Standard Order (TSO) C90. This would mean that the net meets the National Aerospace Standard (NAS) 3610. TSO C90b, for example, would meet NAS3610, revision 8. A net meeting TSO C90 would also meet the fire protection set forth in FAR Part 25. Like all TSO products, the markings required by FAR Section 21.607(d) must be in place. In addition, nets must also be marked with the burning rate; weight of the article to the nearest pound; the identification code of the article in accordance with NAS 3610; and, if the net is not omnidirectional, the words "FORWARD", "AFT", and "SIDE". *(Note: A TSO does not convey*

installation approval.)

2. A net manufactured under an FAA-PMA (Parts Manufacturer Approval) and eligible for installation on your aircraft.

3. A net produced under a one time Supplemental Type Certificate (STC).

4. A net produced under Designated Engineeering Representative (DER) approved drawings.

5. A net manufactured as part of the Type Certificate (TC).

Does an approved net need installation approval?

Yes. A net must be installed as part of the TC, STC, PMA, or Field Approval. A Field Approval would be required for the installation when the approved data contained in the FAA Form 8110-3 is only for the structural aspects. This approval is only for the engineering design data and does not approve the actual installation.

How would you replace a net originally produced as part of an STC or DER approved drawings?

Assuming the net was not produced under an FAA-PMA or TSO, a part may be produced by an FAA certificated repair station with the intent of installing it on a type certificated product (aircraft) that the repair station has in house for repair. Production of such parts is authorized in accordance with FAA Order 8000.50, *Repair Station Production of Replacement or Modification Parts*. Such parts may not be offered for sale as separate items. To make a long story short, the net cannot be put in a box and sold to you as a part. It must be consumed in the repair of your aircraft and installed by that person.

What regulation and amendment does your net have to meet?

The answer depends on the certification basis of your aircraft, and whether the installation is part of the TC, an alteration, or a replacement. First, determine the original date of the airworthiness certificate issued by the manufacturer or manufacturer conformity statement. If the net was installed prior to or on that date, it would be considered part of the TC. In this case, the net must meet the applicable regulations incorporated by reference in the type certificate. After that date, it would be considered an alteration, and the net should meet the applicable regulations in effect on the date of the application, plus any other amendments the administrator finds to be directly related, *if FAR Section 21.101(b) is applicable*. Section 21.101(b) is applicable, for example, if the burn standards or tests for demonstrating compliance with Section 25.853 or 25.855 have changed appreciably. In any case, compliance with the latest standards should always be encouraged.

A replacement net must meet the same

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Required Documentation for Repair Stations

As a result of recent Government Accounting Office (GAO) audits on certificated repair stations and the FAA, it was reported that current guidance available to aviation safety inspectors did not have the degree of specificity on the documentation that must be maintained by the repair station. Currently, the criteria for required documentation to be maintained and retained by certificated repair stations, is found in FAR Part 145 and FAA Order 8300.10. The following list of documents required to be maintained by a repair station was provided in a recently released FAA bulletin, HBAW 99-06.

1. Copies of completed work orders/travelers.
2. Copies of inspection records on purchased materials
3. Copies of preliminary inspection records on all articles that are being maintained.
4. Copies of tool/equipment calibration records.
5. Copy of current capability list (when applicable).
6. Current operations specifications.
7. Current repair station certificate.
8. Copies of supplier evaluations when contracting out work.
9. Copies of materials/process test reports traceable to work order/traveler.
10. Copy of roster of supervisory personnel.
11. Copy of roster of inspection personnel.
12. Copies of airman certificate/A&P certificates.
13. Copies of completed FAA Form 8130-3/JAA Form 1.
14. Copies of completed FAA Form 337.

Even though it was not required by regulation, it was also suggested that copies of Suspected Unapproved Parts reports and defect or airworthiness conditions (M & D), be maintained by repair stations as a matter of good business practice.

standards as did the original or properly altered condition (FAR Section 43.13(b)). FAR Section 121.312 or 135.170 should be considered, if appropriate. *(Please note that previous regulatory amendments referred to in the TC data sheet, or the amendment existing at the time of the alteration, may not be included in the installer's copy of the current regulation. To order a copy, or subscription to a particular regulation including all past amendments, please refer to Advisory Circular (AC) 00-44II or call the Superintendent of Documents Order and Information Desk at 202 512-1800).*

I hope that these series of questions will be helpful when you evaluate a previous installation or you next install a cargo restraint system as a replacement or alteration. Keep in mind that many of these same issues apply to other installations as well. If you have any questions, please feel free to contact me at 860 654-1028.

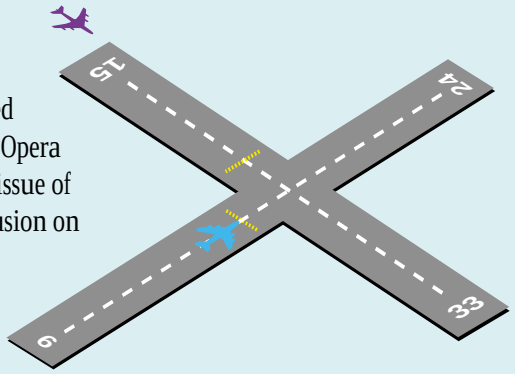
Air Carrier Seminar Report

The Windsor Locks Flight Standards District Office held its annual Air Carrier Seminar on April 28, 1999, at the Connecticut Air National Guard facility at Bradley Interna-tional Airport. With over 50 representatives of the district's Part 121 and 135 air carriers in attendance, inspectors from the office covered various operations and maintenance oriented subjects. Among the subject matter was the revised Land and Hold Short Operations policy; an avionics update including the requirements for Reduced Vertical Separation Minima (RVSM), Required Navigation Performance (RNP), and European requirements for collision avoidance systems; a review of Part 135 maintenance requirements; a discussion of FAA bulletins and how they apply to an operator; and a review of the proposed rules on Aging Aircraft.

Feedback from the evaluations of the attendees generally reflected a very favorable response. However, some comments indicated that at least some of the subjects only applied to certain specialties or types of operations. For example, RVSM and RNP subjects applied primarily to turbojet operators and not to those who confine their operations to domestic flights, and some topics were of interest to only operations or maintenance personnel. Therefore, for next year we will attempt to organize the seminar to allow individuals the opportunity to attend only the sessions that apply to their interest or specialty. Also, since the topic has now become so complex, we will plan a separate seminar for

operations involving special use airspace (RVSM, RNP, North Atlantic operations, etc.). Please remember that we are always open to specific suggestions on future topics, so please do not hesitate to contact us with your ideas.

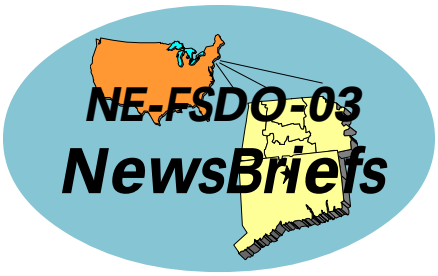
More on LAHSO



Since we last discussed the revised policy on Land and Hold Short Operations (LAHSO) in our previous issue of *Airwaves*, there has been some confusion on the policy especially as it affects FAR Part 121 and 135 air carriers. First, it seems that FAA Order 7110.199, published by the FAA's Air Traffic Service, defines an air carrier as one who only operates under FAR Part 121. The intent was to include all air carriers regardless of whether or not they operate under Part 121 or 135. Bulletin HBAT 99-04B, published by the Flight Standards Service, applies to Part 121, 135, and 129 (foreign) air carriers. In order for an air carrier to be authorized LAHSO, it must be issued the revised operations specifications (op specs), paragraph, A027, and is limited to conducting LAHSO at only those airports listed in the appendix of Order 7110.199.

Also, since our last issue two more LAHSO bulletins were issued, FSGA 99-02A, and HBGA 99-08. FSGA 99-02A pertains to all Part 91 operators with aircraft less than 20 seats, and a maximum payload capacity of 6000 lbs. HBGA 99-08 pertains to aircraft with 20 seats or more, or a maximum payload capacity of 6000 lbs. or more. Part 125 operators will also be issued paragraph A027 for authorization to conduct LAHSO and should comply with the terms of the bulletin. Part 91 operators who have full deviation authority from Part 125, are not issued op specs, but should provide its crewmembers with all the necessary information to conduct LAHSO and comply with the terms of the bulletin. In addition, Part 141 pilot schools, Part 142 training centers, flight instructors, and designated pilot examiners should emphasize the revised LAHSO policy in their training and testing.

These latest revisions to the LAHSO policy have been introduced over a very short period of time and we understand there may continue to be some confusion while implementation of this policy is maturing, so if you have any questions, please do not hesitate to contact your assigned principal inspector or local FSDO.



*Copies of FAA Bulletins, Advisory Circular (AC) Checklist, notices of rule changes, and other Flight Standards information, can be downloaded from the Internet world wide web at **www.faa.gov/avr/afshome.htm**. You may also contact your local FSDO for a copy of a particular bulletin. AC's may be ordered from, the Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954 (phone orders: 202 512-1800;fax: 202 512-2250). Master Minimum Equipment Lists (MMEL) may be downloaded from the internet at **www.opspecs.com** or you can request the specific MMEL from your local FSDO.*

Safety Considerations for Jumpseat Occupants

The FAA has published guidance in Bulletin HBAT 99-05 (also known as HBAW 99-05 and HBGA 99-09), that addresses the physical, cognitive, and language capabilities of any person occupying a flight deck jumpseat or observer's seat. In the bulletin the FAA states that safety considerations mandate more stringent physical capabilities for those occupying the jumpseat due to the critical nature of the flight deck environment. According to the FAA, the presence of any person on the flight deck should not lead to an unsafe condition or impede the flight crewmembers' performance of emergency procedures. The bulletin's appendix contains detailed criteria for certificate holders to apply when judging whether or not an authorized person qualifies to occupy a jumpseat.

Permission to Use Repair Data for One Year

The FAA is permitting its aviation safety inspectors to accept repair data found in the 1988 issued version of Advisory Circular (AC) 43.13-1A (change 3), *"Acceptable Methods, Techniques, and Practices-Aircraft Inspection and Repair"*. This authority will be issued for one year (May 10, 1999 -May 9, 2000) and is contained in bulletin FSAW 99-03. The reasons for this temporary authority is the lack of availability of the printed version of the revised AC 43.13-1B. Additional details may be found in the above bulletin.

Approval of Avionics for Export

Apparently there continues to be confusion as to what actually constitutes newly overhauled avionics components suitable for export. To help alleviate this continued confusion, the FAA has reissued Bulletin FSAW 94-04A, originally published in 1994.

According to the bulletin a component will not require any disassembly as per FAR Section 43.2(a), if it has undergone testing and is found to be in conformance to an approved standard. Avionics components are considered *"newly overhauled"* for export when they have been disassembled to the extent necessary to facilitate inspection and repair, and tested in accordance with approved standards and technical data acceptable to the FAA. The component manufacturer's test specification or data may be used as a basis for this conformity. Avionics components may be *"returned to service"* and shipped to domestic and foreign operators using FAA Form 8130-3, *regardless of its destination*. (Reference FAA Order 8130.21A, "Procedures for Completion and Use of FAA Form 8130-3, Airworthiness Approval Tag.") When using FAA Form 8130-3 as a return to service document, the criteria for *"new"* or *"newly overhauled"* will not be necessary. When FAA Form 8130-3 is used for return to service, it must show the data required by FAR Section 43.9.

In an effort to harmonize airworthiness standards, the FAA and other civil authorities have agreed to the use of FAA Form 8130-3 as a basis for export airworthiness approval and as a means for returning components to service without requiring that each component be *"new"* or *"newly overhauled."* It is still incumbent upon the shipper and their customers to ensure the requirements of the importing country are met.

"When FAA Form 8130-3 is used for return to service, it must show the data required by FAR Section 43.9."

Yugoslavia (Serbia-Montenegro) Added to Sensitive Areas

As was probably expected, the FAA has added the federation of Yugoslavia

(includes Serbia and Montenegro) to the list of internationally sensitive areas. All air carriers currently require authorization to conduct air carrier operations into these sensitive areas. Operations within these countries are usually restricted by international agreements and sanctions. Once approved, the country is included in the air carrier's operations specifications. A listing of all the sensitive areas is included in bulletin FSAT 99-04. A sample form listing the information required to obtain authorization is also provided in this bulletin. Please consult the above bulletin for further details or contact your assigned principal operations inspector (POI).

Use of Child Restraint Seats

The FAA encourages air carriers under Part 121 or 135 to allow the use of empty seats to accommodate Child Restraint Seats (CRS); however, the air carriers are under no obligation to allow non-ticketed children to occupy empty seats. According to a recently issued bulletin, FSAT 99-03, air carrier personnel responsible for the seating of passengers should be aware of the following CRS criteria: The CRS should have a solid back and seat; have restraint straps installed to securely hold the child to the CRS; should be labeled stating that it has been approved for aviation use; and, the CRS should have instructions on the label which must be followed (labels of approval from other countries are allowed and therefore may vary).

Additionally, the bulletin states that the CRS should be installed in forward facing aircraft seats and in accordance with instructions on the label. This includes placing the child restraint in either a forward or aft facing direction in the passenger seat. The CRS should not be installed in the same row of an emergency exit nor in the row forward or aft of an emergency exit. A window seat is the preferred location; however, other locations may be acceptable, provided the CRS is not installed between other passengers and the aisle used to evacuate the aircraft. A responsible adult should occupy a seat next to the child.

For further details please consult the above bulletin or contact your assigned POI.

Schedule of Safety Seminars on Web

The schedule for the Windsor Locks FSDO Safety Seminars, as well as our Portland (ME) and Bedford (MA) FSDO, are available at www.airsafety.org/semsched.html *or* www.faa.gov/region/ane/flightstds.

When Repair Stations Conduct Air Carrier Maintenance Away from Primary Facility

Repair stations which perform contract maintenance for a FAR Part 121 air carrier, must have a statement in its operations specifications (opspecs) indicating the contractual geographic location where the repair station will perform the work. In addition, when the contractual arrangements involve maintenance by the repair station away from its parent station, the procedures necessary to comply with FAR Sections 145.2 and 145.51(d) must be included in the repair station's Inspection Procedures Manual (IPM). The opspecs must also include the names of the air carriers for which maintenance is being performed by the repair station and must include the limitations for each customer.

Likewise, the Part 121 air carrier is required to include procedures in its manual for the accomplishment of its maintenance program. The air carrier is also responsible for ensuring that the proper maintenance is performed on their aircraft, regardless of who performs the actual maintenance. In each case, the procedures used by the air carrier and repair station must be acceptable to the FAA. Please see bulletin HBAW 99-04 for further information or contact your assigned principal inspector.

Air Force Publishes Fluorescent Penetrant Alert

The Air Force Research Laboratory removed Brent International, P7F-Series Fluorescent Penetrants from the Qualified Products List (QPL) of SAE QPL-AMS-2644, which has replaced MIL-I-25135 QPL. The action was prompted by an investigation conducted by the Air Force Research Laboratory which found poor inspection performance of Brent International Fluorescent Penetrants P7F1, P7F2, and P7F3 when used in conjunction with Form B (water-soluble) developers. Satisfactory performance was noted when used with Form A (dry powder), Form D (water suspendable) and Form D (non-aqueous) developers. The penetrant's poor inspection performance was identified during the performance check of a newly installed tank of Form B (water soluble) developer at a military facility.

The FAA is advising that any facility utilizing the Brent International penetrants with a water soluble developer may not be performing an adequate inspection based on the Air Force data. It is recommended that performance checks of fluorescent penetrant inspection operations are performed to identify poor penetrant system performance.

List of Aircraft to be Included in Opspecs

Upon implementation of the new automated operations specification system, principal maintenance inspectors (PMI) will include a list of aircraft in paragraph D085 of the opspecs of all Part 121, 135, and 125 operators regardless of the type of operation conducted. The aircraft listing in D085 may also contain the certificate holder's aircraft that are not in revenue service. This includes, but is not limited to, aircraft that are used in heavy maintenance, in storage, awaiting parts, newly purchased, or in STC maintenance. However, for aircraft not in revenue service, the certificate holder must have procedures in place specifying how these aircraft are handled. Currently, the automated opspec system is being implemented in all FAA Flight Standards District Offices (FSDO), Certificate Management Offices (CMO), and International Field Offices (IFO). Scheduled completion for all offices is by March, 2000. Our office is tentatively scheduled for implementation in August, 1999.

Sightseeing Flights Require Drug/Alcohol Tests

Operators who conduct sightseeing flights for compensation or hire, including charitable flights fund raising flights, must participate in a FAA approved Anti-Drug/Alcohol Misuse Prevention Program, according to the FAA's Drug Abatement Division. Part 121, Appendicies I and J, require that Part 121 and 135 air carriers, as well as operators conducting sightseeing flights as defined by FAR Section 135.1 (c) participate in the drug/alcohol testing program. Questions on this rule may be made directly to the FAA's Drug Abatement Office at 202 267-8442.

Revised Pilot Examiner Qualifications

The FAA established revisions in the eligibility requirements for Designated Pilot Examiners (DPE). The revisions, published in a recently released bulletin, HBGA 99-03, also attempt to close some "loopholes" and clarify eligibility requirements. For example, the prerequisite eligibility qualification requirements for DPE applicants who apply for authority to conduct Airline Transport Pilot (ATP)-airplane certification tests have been revised to require 100 hours of pilot-in-command (PIC) aeronautical experience at night and 200 hours of PIC aeronautical experience in a complex airplane. This change was necessary since the previously required PIC experience for the ATP examiner was less than that for a Commercial-Instrument Examiner (CIRE). Another example is the clarification of the requirement to *"be employed as a professional flight instructor"*. The FAA will now allow experience as a *"flight instructor"*, or in *"another comparable position"*, or *"as a check airman or check pilot"* for a Part 121, 125, or 135 operator. This bulletin updates information contained in FAA Orders 8700.1 and 8710.3C. Please refer to the above bulletin for a full explanation of the changes.

Keeping Aircraft Flight Manuals Current

As a result of a 1997 aircraft accident, the NTSB (National Transportation Safety Board) concluded that one of the probable causes was the FAA's failure to ensure that an approved procedure for the accident airplane's de-ice system operation was implemented by U.S.-based carriers. Contributing to the accident was the operator's failure to establish, adequately communicate, and emphasize to flightcrews, specific minimum airspeeds for flight in icing conditions through its memos, bulletins, manuals, and training program.

The FAA issued bulletin HBAT 99-07 to address NTSB safety recommendations resulting from the accident investigation and to ensure that flightcrews are receiving "current" aircraft manufacturer operating information on the aircraft they operate by incorporating "current" approved aircraft manufacturer information. The bulletin clarifies the word, "current", as it relates to the Aircraft Flight Manual (AFM), Company Flight Manual (CFM), and Company Training Program. It also establishes policy for handling aircraft manufacturer operations bulletins. In addition, the bulletin requests that each Part 121 and 135 operator develop a system for the timely receipt of AFM revisions within 30 days of FAA approval; submit a written action plan to the Principal Operations Inspector (POI); notify the POI of an AFM revision within 15 days of receipt; and, make available on request, a "current" copy of the AFM to the POI. The FAA believes that the certificate holder has an "ongoing obligation" to keep a current AFM or CFM for each make and model aircraft.

Bulletin 99-07 contains the details of the reasoning behind this recent FAA action as well as a discussion of how "currency" is defined in the legal sense regarding the AFM, CFM, and company training programs. Please contact your assigned POI for further information.

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Federal Aviation Administration
Windsor Locks Flight Standards District Office

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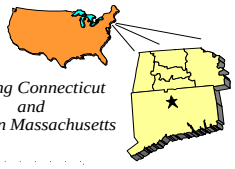

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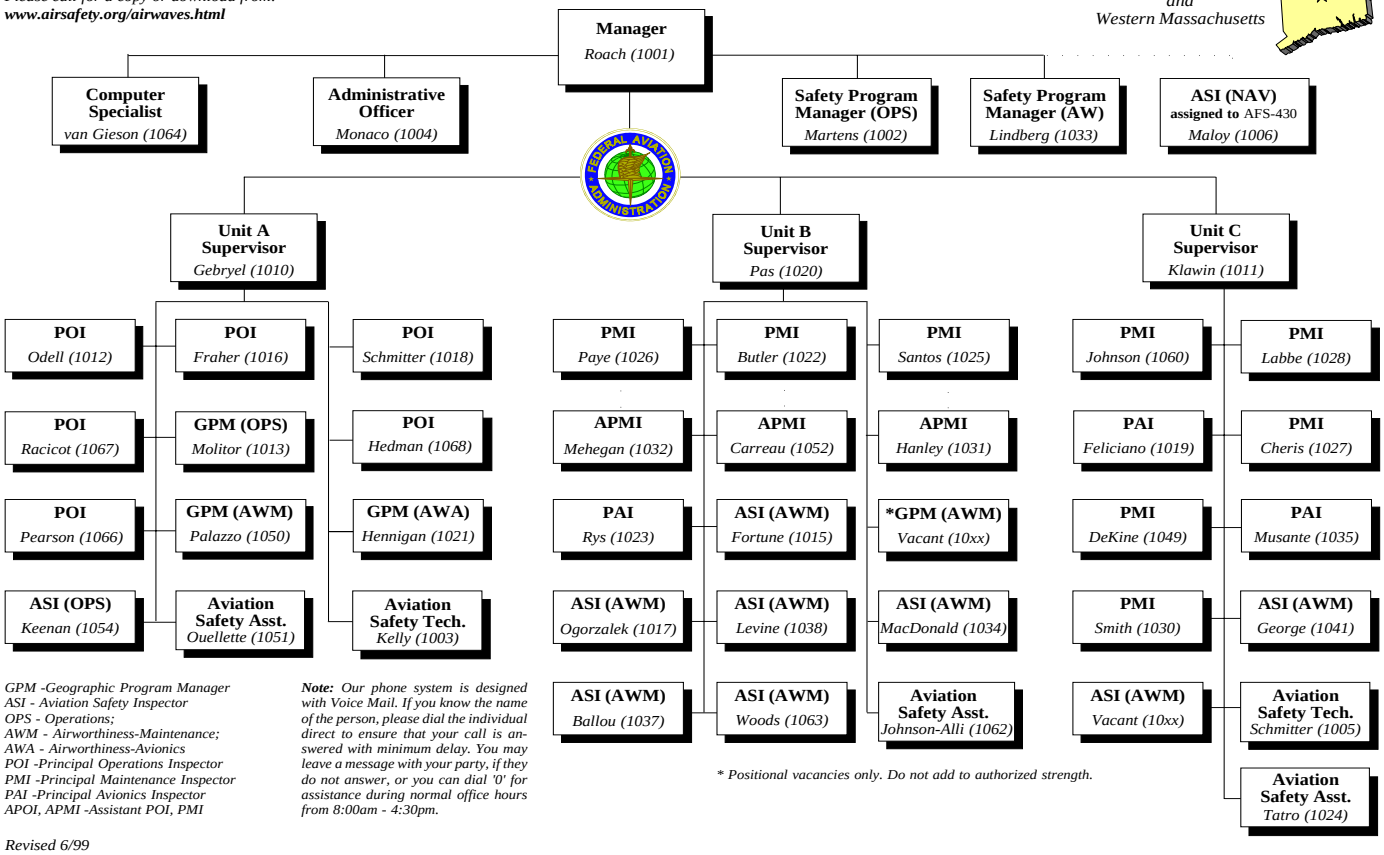

GPM -Geographic Program Manager
ASI - Aviation Safety Inspector
OPS - Operations;
AWM - Airworthiness-Maintenance;
AWA - Airworthiness-Avionics
POI -Principal Operations Inspector
PMI -Principal Maintenance Inspector
PAI -Principal Avionics Inspector
APOI, APMI -Assistant POI, PMI

***Note:** Our phone system is designed with Voice Mail. If you know the name of the person, please dial the individual direct to ensure that your call is answered with minimum delay. You may leave a message with your party, if they do not answer, or you can dial '0' for assistance during normal office hours from 8:00am - 4:30pm.*

** Positional vacancies only. Do not add to authorized strength.*

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